

SCAN METHOD FOR BUILT-IN-SELF-REPAIR (BISR)

ABSTRACT

A system and method for protecting the values stored in a BISR repair block and, optionally, debugging the BISR repair logic without altering normal test flow is implemented by a circuit comprising a plurality of soft latches within the BISR repair block, the soft latches being coupled together to form a BISR scan chain for holding BISR repair information. A chip level scan enable signal for enabling a scan test and a scan hold control signal for controlling holding of the repair information in the soft latches of the BISR scan chain is provided to the circuit. The chip level scan enable signal and the scan hold control signal cooperate to control connection of the BISR scan chain to other scan chains during a scan test, so that the BISR repair information is held within the soft latches. A diagnose enable signal may likewise be provided. The diagnose enable signal cooperating with the chip level scan enable signal and the scan hold control signal for enabling debugging of logic connecting the BISR scan chains.